

January 6, 2012

Mr. William Jones
US EPA Region 5
Water Enforcement & Compliance Assurance Branch
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RE: Inadequacy of State of Michigan NPDES Permit No: MI0055735 – Gerald R. Ford International Airport (GFIA) - including GFIA's

- 1. Final Effluent Limitations and Monitoring Requirements;**
- 2. Lack of Iterative and Improved Best Management Practices (BMPs);**
- 3. Inappropriate Plans to comply with its ADF Discharge Prohibition;**
- 4. Stormwater Pollution Prevention Plan (SWPPP); and**
- 5. Draft Deicing Runoff Management and Monitoring Program Plan.**

Dear Mr. Jones:

Thank you for the update on Wednesday, December 28, 2011 regarding how best to address our concerns about the significant water quality impacts resulting from the Gerald R. Ford International Airport (GFIA) gross discharge of Aircraft Deicing Fluids (ADF) and GFIA's inadequate approach to compliance with its ADF Discharge Prohibition.

It is my understanding that you believe many of our GFIA Stormwater Discharge concerns may best be addressed by Mr. Brian Bell, Region 5's authority on Stormwater Permits; therefore, I have copied Mr. Bell on this correspondence as well. As you know, Mr. Bell was my initial contact and was presented with our concerns and information in early November 2011. It would appear that resolution of our concerns may require input from both the Water Enforcement and Compliance Branch and the NPDES Permits Program.

Request for State Permit Oversight and Enforcement/Compliance Assistance

We request that EPA Region 5 proactively assist in the following areas:

- Provide Permit development oversight such that the Michigan Department of Environmental Quality (MDEQ) applies adequate and appropriate Limitations and Monitoring Requirements to the GFIA Stormwater Permit. This should include iterative and adaptive-management Best Management Practices (BMPs), especially with regard to their management of ADFs.
- Provide Enforcement and/or Compliance Assistance such that MDEQ assesses and enforces all the GFIA NPDES Stormwater Permit standards, to include MDEQ's use of conventional methods of enforcement;

- Address the adequacy of GFIA's Stormwater Permit such that it provides evident consideration for the bigger picture, i.e., the health and safety of residents, as well as water quality of streams/rivers; and
- Strongly encourage MDEQ to adhere to their own Part 8 rule (which was probably adopted from the CWA), and states that "The department is committed to, and strongly encourages, the use of pollution prevention, source control and other waste minimization programs."
Case in point: The current BMPs include Aircraft Gate stormwater collection sumps, which purportedly capture 30% of the 85,000 to 100,000-plus gallons of ADF discharged annually, are not doing enough to satisfactorily resolve any of the significant water quality impacts that have been occurring for years.

Concerns and Background

Bluntly stated, the current NPDES permit has no "teeth." There are no effluent limits, no controls other than ineffective BMPs, and no limits on volume. In addition, there is no condition to limit, reduce or cease discharge. An unconventional condition of the permit requires that the airport resolve a documented nuisance biofilm issue and prescribes terms for how to resolve it by the termination date of the current permit. Essentially, the unconventional condition (and MDEQ's position relating to contributing source liability) forced the airport to abandon the current outfall and seek discharges to an alternative or new outfall.

To complicate matters, MDEQ has not issued any Notice of Violation relating to this nuisance condition or any other documented conditions, and has made the biofilm issue the focal point of their processing. The airport publicly proclaims no violations and has the gall to profess itself as a good neighbor. The airport only admits that they may be partially responsible for the biofilm condition. Clearly, adult supervision and transparency of cause-and-effect is needed here.

Additionally, MDEQ appears resolved to "only" assessing numerically derived water quality standards (see DO modeling study attached to e-mail), we assume because these standards are obviously easier to enforce. Moving the outfall location without any additional source control is illogical from any engineering or environmental risk-management common sense approach to problem resolution. Moving the location of an outfall to purely eliminate your group's liability for a documented problem in one stream is not a commonly accepted response to resolve a loading issue (from a regulatory perspective) or remedial approach from any environmental perspective.

In essence, MDEQ would be agreeing to allow the airport a second chance to get this right without even entirely understanding the "cause-and-effect" of their initial discharge practices or to follow up with the complete resolution. The airport's desired plan is to essentially move the outfall location from the small Trout Creek to the larger Thornapple River and start over again with the same operations and ineffective BMPs.

Furthermore, the following airport activities, proposed and current, give us serious cause for alarm:

- Moving the outfall and not considering the "alarming erosion," "blue-green turbidity" and "sweet onion odors," and absence of aquatic wildlife diversity (all recorded observations by MDEQ field staff);
- Ignoring the surfactant and alcohol solvent properties of Propylene Glycol (PG - as a carrier of other tarmac chemicals in stormwater flow);
- Ignoring the airport's not-so-distant history with impacted wetlands (previous receiving waters) requiring remediation;
- Not understanding the geology/hydrogeology relating to failed natural clay liner systems that existed at the former hazardous waste disposal site (now under the N-S runway);
- Ignoring the hazardous tackifier additive(s) in the Anti-Icing solutions that were not disclosed on any previous permits;
- Not understanding the regulatory gap created by the groundwater discharge permit exemption, (a groundwater discharge permit would have been able to resolve hydro-geologic concerns and mobility of contamination) where the exemption apparently applies to "controlled" de-icing activities at airports;
- Lack of recognition and sensitivity of the overall setting, which includes populated residential neighborhoods with private wellheads adjoining the carrier stream/river, the public parks and the high recreational value placed on these water bodies, which appears mindless and careless;
- Baseline conditions of the new proposed outfall location have not been assessed to any significant degree. An airport consultant admits that the resolution of the biofilm issue cannot be guaranteed at the new outfall location, yet MDEQ proclaims that they will hold the airport accountable if the biofilm issue occurs again. MDEQ refers to instituting "progressive enforcement," which we can only interpret will allow the airport to continue discharging during the interim until they can figure out how to get this right if there are any problems.

Minimum Expectations and Recommended CDP Installation

Any proposed solution that does not consider enforcing all the standards and does not propose a significant pollution prevention, source control or waste reduction mechanism falls short of meeting the protection measures afforded to the public and the public trust of the water bodies.

Centralized Deicing Pads (CDPs) offer measures that can immediately improve the capture efficiency by three (3) times and provide the best opportunity to protect the public and public resources. CDPs are not uncommon and other Michigan airports have had success using these systems as the basis for ADF recovery/recycling.

Basis for Revised Effluent Limitations

Attached is the WQBEL study/model that was conducted by the MDEQ for the newly proposed outfall. This WQBEL study/model may become the basis for future effluent limits in a new permit. We are not aware of the airport's response to this memo, but, understand that a meeting will be planned shortly. The DO modeling does not really specifically address the issues that we feel are relevant.

Next Steps

We would appreciate your review and timely response regarding our above concerns and suggestions, both from EPA's Compliance and Enforcement Authorities perspective as well as your NPDES Stormwater Permitting Delegated Program perspective.

Given my previous discussions with you and Mr. Bell, and the previous documentation that I shared with Mr. Bell in November 2011, I'm confident that you have a good feel for the disparities occurring here. We look forward to your response and engagement with us and MDEQ, and as always, if I can provide further information, please let me know.

Thanks for your help.



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